June 14, 2004

Acquisition

Acquisition of the MH-47G Helicopter Service Life Extension Program
(D-2004-089)

Department of Defense
Office of the Inspector General

Quality *Integrity* *Accountability*

Additional Copies

To obtain additional copies of this report, visit the Web site of the Inspector General of the Department of Defense at http://www.dodig.osd.mil/audit/reports or contact the Secondary Reports Distribution Unit, Audit Followup and Technical Support at (703) 604-8937 (DSN 664-8937) or fax (703) 604-8932.

Suggestions for Future Audits

To suggest ideas for or to request future audits, contact Audit Followup and Technical Support at (703) 604-8940 (DSN 664-8940) or fax (703) 604-8932. Ideas and requests can also be mailed to:

ODIG-AUD (ATTN: AFTS Audit Suggestions)
Inspector General of the Department of Defense
400 Army Navy Drive (Room 801)
Arlington, VA 22202-4704

Defense Hotline

To report fraud, waste, or abuse, contact the Defense Hotline by calling (800) 424-9098; by sending an electronic message to Hotline@dodig.osd.mil; or by writing to the Defense Hotline, The Pentagon, Washington, DC 20301-1900. The identity of each writer and caller is fully protected.

Acronyms

CJCS	Chairman, Joint Chiefs of Staff
C4I	Command, Control, Communications, Computers, and Intelligence
DCMA	Defense Contract Management Agency
ICTO	Interim Certificate to Operate
JCS	Joint Chiefs of Staff
LRIP	Low-Rate Initial Production
MOA	Memorandum of Agreement
ORD	Operational Requirements Document
SOCOM	Special Operations Command
USASOC	U.S. Army Special Operations Command

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202–4704

June 14, 2004

MEMORANDUM FOR COMMANDER, U. S. ARMY SPECIAL OPERATIONS COMMAND
PRODUCT MANAGER, TECHNOLOGY APPLICATIONS PROGRAM OFFICE

SUBJECT: Report on the Acquisition of the MH-47G Helicopter Service Life Extension Program (Report No. D-2004-089)

We are providing this report for review and comment. We considered management comments on a draft of this report when preparing the final report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. The U. S. Army Special Operations Command comments were responsive to Recommendation 1. but not responsive to Recommendation 2. Based on comments from the Director, Joint Staff, we have revised Recommendations 1. and 2. to align with the most current policy of the Joint Chiefs of Staff. We request that the Commander, U. S. Army Special Operations Command coordinate with the Joint Staff to provide comments on Recommendations 1. and 2. by July 14, 2004.

If possible, please send management comments in electronic format (Adobe Acrobat file only) to Aud--@dodig.osd.mil. Copies of the management comments must contain the actual signature of the authorizing official. We cannot accept the / Signed / symbol in place of the actual signature. If you arrange to send classified comments electronically, they must be sent over the SECRET Internet Protocol Router Network (SIPRNET).

We appreciate the courtesies extended to the staff. Questions should be directed to Mr. John E. Meling at (703) 604-9091 (DSN 664-9091) or Mr. Harold C. James at (703) 604-9088 (DSN 664-9088). See Appendix C for the report distribution. The team members are listed inside the back cover.

By direction of the Deputy Inspector General for Auditing:

Mary L. Ugone
Assistant Inspector General
for Acquisition Management

Office of the Inspector General of the Department of Defense

Report No D-2004-089 **June 14, 2004**
(Project No. D2004AE-0014)

Acquisition of the MH-47G Helicopter Service Life Extension Program

Executive Summary

Who Should Read This Report and Why? Civil service and military managers who are involved in the management, support, and oversight of the MH-47G Helicopter Service Life Extension Program should read this report because it discusses issues that must be addressed before the program progresses further through the acquisition process.

Background. This report is the second of two reports that discuss the acquisition of DoD heavy-lift helicopters. The first report discussed the acquisition of the Army CH-47F Improved Cargo Helicopter (the CH-47F Program). This report discusses the acquisition of the U.S. Special Operations Command MH-47G Service Life Extension Program (the MH-47G Program). The MH-47G Program is a modification of the Special Operations Aviation Regiment fleet of MH-47D and MH-47E Chinook helicopters to incorporate the service life extension elements of the Army CH-47F Program. The modifications include an airframe rebuild for reduced vibration, new engines for increased lift and range, and new and modified avionics to support the special operations mission. By upgrading and extending the service life of the MH-47 fleet, the MH-47G Program will provide for rapid movement of special operations forces, equipment for counterterrorism actions, strategic intelligence strikes, tactical reconnaissance, infiltration, resupply, extraction, and interdiction operations during night, day, adverse weather, and limited visibility conditions. The estimated cost of the MH-47G Program is $958.1 million for 61 MH-47G helicopters: with $12.4 million for research, development, test, and evaluation; and $945.7 million for procurement.

Results. The U.S. Army Special Operations Command did not update the operational requirements documents for the MH-47D/E Service Life Extension Program to fully define interoperability requirements for the MH-47G configuration, and the MH-47G Product Manager did not prepare the Command, Control, Communications, Computers, and Intelligence Support Plan (Support Plan) as required. As a result, the Office of the Joint Chiefs of Staff cannot use the operational requirements documents to effectively review and certify the adequacy of MH-47G requirements for systems interoperability. Additionally, without a Support Plan, the MH-47G Product Manager cannot plan and execute the interoperability testing necessary to allow the Joint Interoperability Test Command to certify that the MH-47G has met interoperability requirements before the full-rate production decision, planned for November 2004. Further, a broad range of DoD offices will be unable to review the Support Plan for the MH-47G when performing interoperability and supportability assessments to determine DoD-wide interoperability shortfalls and potential solutions. Updating the operational requirements document and preparing the Support Plan will allow the Joint Chiefs of Staff to review and certify MH-47G system interoperability requirements, enable the MH-47G Product Manager to plan and execute testing to achieve interoperability certification through the Joint

Interoperability Test Command, and allow concerned DoD offices to better identify DoD-wide interoperability and supportability shortfalls. See the Finding section of the report for detailed recommendations.

The U. S. Special Operations Command and the Army are to be commended for initiating corrective actions during the audit to address audit issues on updating and approving a draft memorandum of agreement for coordinating development and production of the MH-47G and the CH-47F helicopters; completing a memorandum of agreement with the Commander, Defense Contract Management Agency for providing contract management support to the MH-47G Program; revising the test and evaluation master plan by quantifying threshold requirements for measures of effectiveness and suitability, by providing the rationale for not requiring live-fire test and evaluation, and by providing required schedule dates for test resources; and establishing procedures to ensure prompt communication of critical information between their administrative contracting offices. Appendix B provides details on the U.S Special Operations Command and Army corrective actions.

Management Comments and Audit Response. The Deputy Commanding General, responding for the Commander, U. S. Army Special Operations Command, concurred with updating the operational requirements document for the MH-47D/E Service Life Extension Program to fully define interoperability requirements for the MH-47G configuration, stating that the U. S. Army Special Operations Command will submit an amendment to the operational requirements document for the MH-47D/E Service Life Extension Program that will include the requirement for an interoperability key performance parameter. The Deputy Commanding General, responding for the MH-47G Product Manager, nonconcurred with preparing the Support Plan to allow the Product Manager to plan and execute the interoperability testing necessary to allow the Joint Interoperability Test Command to certify that the MH-47G has met interoperability requirements, stating that field experience with the MH-47D/E had sufficiently demonstrated effective system interoperability. The Director, Joint Staff provided unsolicited comments. The Director, Joint Staff agreed with the finding subject to our revising the recommendations to ensure that the MH-47G Program meets requirements for capabilities documentation, interoperability certification, and certification testing in accordance with the latest Joint Staff policy.

Although the Deputy Commanding General's comments were responsive to fully defining interoperability requirements for the MH-47G, we have revised the recommendations based on the Director, Joint Staff comments. Therefore, we request that the Commander, U. S. Army Special Operations Command and the Product Manager for the MH-47G Helicopter Service Life Extension Program comment on the revised recommendations by July 14, 2004. See the Finding section of this report for a discussion of management comments and the Management Comments section of the report for the complete text of the comments.

Table of Contents

Background

This report is the second of two reports that discuss acquisition of DoD heavy-lift helicopters. The first report discussed the acquisition of the Army CH-47F Improved Cargo Helicopter (the CH-47F Program). This report discusses the acquisition of the U.S. Special Operations Command (SOCOM) MH-47G Helicopter Service Life Extension Program (the MH-47G Program). The MH-47G Program is a modification of the existing fleet of MH-47D and MH-47E Chinook helicopters in use in the 160th Special Operations Aviation Regiment of SOCOM. The modification incorporates the service life extension elements of the Army CH-47F Program, including airframe rebuild for reduced vibration and new engines for increased lift and range, along with new and modified avionics to support the special operations mission. By upgrading and extending the service life of the MH-47 fleet, the MH-47G Program will provide for rapid movement of special operations forces equipment for counterterrorism actions, strategic intelligence strikes, tactical reconnaissance, infiltration, resupply, extraction, and interdiction operations during night, day, adverse weather, and limited visibility conditions. Other missions include light infantry operations for special operations contingencies, civil affairs, and psychological operations.

Link to Army CH-47F Program. The MH-47G Program became linked with the Army CH-47F Program when the Army Vice Chief of Staff directed that the CH-47F Project Manager incorporate 61 special operations helicopters (the MH-47G) into the planned production of the CH-47F. Based on the Vice Chief of Staff's direction, the acquisition communities within SOCOM and the Army developed a memorandum of agreement (MOA) to plan the development and upgrade of the MH-47G and CH-47F helicopters. SOCOM plans to upgrade 61 Chinook helicopters to MH-47Gs, and the Army plans to upgrade 300 Chinooks to CH-47Fs.

Program Initiation. SOCOM initiated what is now the MH-47G Program in October 1997, by approving the "Operational Requirements Document for the MH-47D/E Service Life Extension Program." In July 2002, after planning the addition of modified avionics, SOCOM redesignated the program as the MH-47G Helicopter Service Life Extension Program. The SOCOM Product Manager, Technology Applications Program Office and the MH-47G Product Manager manage the MH-47G Program.

Acquisition Strategy. Under the SOCOM acquisition strategy, the legacy MH-47E helicopter design is the baseline configuration to which SOCOM will incorporate the Army CH-47F airframe service life extension with the SOCOM Common Avionics Architecture Suite (CAAS) and additional avionics and hardware modifications to derive the MH-47G helicopter. Because of the incorporation of the service life extension elements of the Army CH-47F Program and the concurrency of the two programs, SOCOM stated in the Single Acquisition Management Plan, September 2002, that the acquisition strategy for the MH-47G would mirror the Army acquisition strategy for the CH-47F. Specifically, as the Army awards contracts for low-rate initial production (LRIP) and full-rate production lots, SOCOM will follow the same contracting strategy for corresponding deliveries for the MH-47G helicopters.

Production Decisions. In August 2002, the SOCOM Acquisition Executive approved the MH-47G Program for entry into LRIP. Because of the increased mission demands for special operations aircraft, the Deputy Secretary of Defense issued Program Decision Memorandum I, December 12, 2002, that required the Army to transfer 16 additional CH-47s to USSOCOM for conversion and rebuild to the MH-47G configuration. Consequently, the Army project manager awarded the LRIP Lot I contract to Boeing Helicopters for 1 CH-47F helicopter with an option for 6 MH-47G helicopters. Additionally, the Army plans to produce 16 MH-47G helicopters in LRIP Lot II and another 16 MH-47G helicopters in the first lot of full-rate production.

Program Funding. SOCOM estimated the cost of the MH-47G Program at $958.1 million for 61 MH-47G helicopters, including $12.4 million for research, development, test, and evaluation, and $945.7 million for procurement.

Objective

The primary audit objective was to evaluate the overall management of the U.S. Special Forces Command MH-47G Helicopter Service Life Extension Program. Because the program was in the LRIP phase, we evaluated management's preparation of the program for the full-rate production phase of the acquisition process. We also evaluated the management control program as it related to the audit objective. See Appendix A for a discussion of the scope and methodology, the review of the management control program, and prior coverage related to the audit objective.

Defining System Interoperability and Supportability Requirements

Although the MH-47G Product Manager had begun LRIP of the MH-47G helicopter, system interoperability and supportability requirements had not been defined to support pre-production testing requirements. Specifically:

- the combat development staff at the U. S. Army Special Operations Command (USASOC) had not updated the operational requirements document (ORD) for the MH-47D/E Service Life Extension Program to fully define the interoperability requirements for the MH-47G configuration, and

- the MH-47G Product Manager had not prepared a Command, Control, Communications, Computers, and Intelligence (C4I) Support Plan for the MH-47G Program.

Those conditions occurred because USASOC combat developers did not follow established DoD policy for timely updating the operational requirements document after planning to add avionics and hardware to upgrade the MH-47D and E helicopters to the MH-47G configuration, and the MH-47G Product Manager did not follow established DoD policy for preparing a C4I Support Plan to address MH-47G interoperability and supportability requirements. As a result, the Joint Chiefs of Staff (JCS) cannot use the ORD to effectively review and certify the adequacy of MH-47G requirements for systems interoperability. Additionally, without a C4I Support Plan, the MH-47G Product Manager cannot plan and execute the interoperability testing necessary for the Joint Interoperability Test Command to certify that the MH-47G has met interoperability requirements before the full-rate production decision, planned for November 2004. Further, the broad range of DoD offices that review individual program C4I Support Plans to determine DoD-wide interoperability shortfalls and potential solutions do not have access to the C4I Support Plan for the MH-47G Program.

Requirements and Supportability Policy

The DoD provides policies and guidance for DoD Components to use in defining system requirements in ORDs and in preparing C4I Support Plans. The primary DoD requirements-related regulations being used in July 2002, when USASOC decided to upgrade the MH-47D and E helicopters to the MH-47G configuration, included Chairman, Joint Chiefs of Staff (CJCS) Instruction 3170.01B, "Requirements Generation System," April 15, 2001; CJCS Instruction 6212.01B, "Interoperability and Supportability of National Security Systems, and Information Technology Systems," May 8, 2000; and DoD Instruction 4630.8, "Procedures for Interoperability and Supportability of Information Technology

(IT) and National Security Systems, (NSS)" May 2, 2002. The "Interim Defense Acquisition Guidebook," October 30, 2002 (the Guidebook), provides guidance for preparing and reviewing the C4I Support Plan.

CJCS Instruction 3170.01B. CJCS Instruction 3170.01B provides policies and procedures for developing, reviewing, validating, and approving ORDs. The ORD, as defined in the Instruction, contains operational performance requirements for a proposed system. Operational performance requirements are to be defined for system performance parameters, such as range, payload and speed; information exchange requirements; interoperability and standardization; logistics and readiness, including operational availability, and frequency and duration of maintenance; command, control, communications, computers, and intelligence support standardization; and human systems integration.

On June 24, 2003, the CJCS issued CJCS Instruction 3170.01C, " Joint Capabilities Integration and Development System," which requires that managers of programs approaching LRIP document requirements through a Capabilities Production Document, rather than an ORD. However, CJCS Instruction 3170.01C allows DoD Components to update existing ORDs as long as they are updated in accordance with the revised Instruction.

CJCS Instruction 6212.01B. CJCS Instruction 6212.01B establishes policies and procedures to enable the Joint Chiefs of Staff Director for Command, Control, Communications and Computers Systems Directorate (J6) to certify interoperability requirements in the ORD and the C4I Support Plan. The Instruction also details a methodology to develop the key performance parameter for interoperability and provides a checklist for J6 certification of program C4I Support Plans.

On November 20, 2003, the CJCS issued CJCS Instruction 6212.01C, "Interoperability and Supportability of Information Technology and National Security Systems," which superceded CJCS Instruction 6212.01B. CJCS Instruction 6212.01C requires a net-ready key performance parameter instead of the interoperability key performance parameter. The broader-scoped, net-ready key performance parameter includes compliance with the Net-Centric Operations and Warfare Reference Model, applicable Global Information Grid Key Interface Profiles, DoD information assurance requirements, and supporting integrated architecture products required to assess information exchange and use for a given capability. However, CJCS Instruction 6212.01C states that the interoperability key performance parameters contained in existing ORDs will remain valid until superceded by completed integrated architectures. Additionally, CJCS Instruction 6212.01C requires an Information Support Plan instead of the C4I Support Plan. The Information Support Plan, as defined in CJCS Instruction 6212.01C, must contain sufficient detail to permit J6 interoperability certification, as did the C4I Support Plan.

DoD Instruction 4630.8. The DoD Instruction provides policy and responsibilities for interoperability and supportability of the information technology segment of weapons systems and defines the purposes and elements of a C4I Support Plan.

The Guidebook. The Guidebook defines the format and review process for a C4I Support Plan. Specifically, the Guidebook provides a sample format with descriptions of the suggested content of each format element. The Guidebook also lists the DoD offices that are responsible for reviewing the C4I Support Plan.

Updating the ORD

On March 18, 1998, SOCOM approved an update to the ORD for the MH-47D/E Service Life Extension Program." The ORD described requirements for sustaining the performance of the existing fleet of MH-47D and E helicopters to meet continuing operational requirements while reducing the support costs associated with the aging fleet. After the March 1998 ORD update, USASOC made significant configuration changes to the planned MH-47D/E Service Life Extension Program that involved modifying the helicopters to include additional equipment. Specifically, in July 2002, USASOC revised its plans for the MH-47D and E helicopters to add the Common Avionics Architecture Suite, the avionics and hardware modifications identified in the Blue Grass Army Depot MH-47E Block III Modifications, September 28, 2000, and the Army's Improved Data Modem to the MH-47D and E helicopters. These equipment additions will modernize the helicopter cockpits and enable the pilots to function in the digital battlefield. USASOC designated the modified helicopter configuration as the MH-47G helicopter and changed the program name to the MH-47G Helicopter Service Life Extension Program. In August 2002, the SOCOM Acquisition Executive approved the MH-47G Program for entry into LRIP.

CJCS Instruction 3170.01B requires that DoD Components update the ORD as a program is further defined between acquisition milestones. Although required, USASOC did not update the ORD for the MH-47D/E Service Life Extension Program to define requirements associated with the MH-47G configuration. Instead, staff at USASOC and the MH-47G Product Management Office stated that operational requirements for the Common Avionics Architecture Suite and the other avionics and hardware modifications added in the MH-47G configuration were included in the following three separate ORDs:

- "Joint Operational Requirements Document AFSOC 022-91-ID Revision 1 for Special Operations Forces (SOF) Enhanced Situational Awareness (ESA)," May 3, 2001 (the Joint ORD) - The Joint ORD between USASOC and the Air Force Special Operations Command documents requirements for a situational awareness system to provide aircrews with near-real-time presentation of emitting and non-emitting threats, targets and other data; integration of enhanced situational awareness system data with existing and planned electronic warfare; and in-flight route replanning.

- "Operational Requirements Document for MH-47 and MH-60 Mission Processor," February 24, 1997 (the Mission Processor ORD) - This ORD documents requirements for a mission processor system to provide fully

integrated, seamless throughput of all onboard avionics, communications, navigation, mission planning, and visual systems, and to provide precise and reliable pilot information and assistance in adverse mission conditions.

- "MH-47D/E Multi-function Display Processor System," September 13, 1995 (the Multi-function Display Processor ORD) - This ORD documents requirements for a multi-function display processor system to provide improved performance and compatibility with new mission processor systems to give pilots state-of-the art visual and interactive data interfaces with all onboard systems, mapping, navigation, forward-looking infrared, and imagery.

To determine whether the three separate ORDs met the intent of DoD policy for developing, validating, and approving system requirements, we discussed the contents of the ORDs with the Offices of the Joint Chiefs of Staff Directors for Command, Control, Communications and Computer Systems (J-6) and for Force Structure, Resources, and Assessment (J8). While the staffs in J6 and J8 stated that the DoD Components could use separate ORDs to document requirements for a program, J6 staff stated that none of the three ORDs supporting the MH-47G Program adequately defined the interoperability requirements for the MH-47G. Specifically, of the three ORDs, only the Joint ORD, which SOCOM and the Air Force approved rather than the DoD Joint Requirements Oversight Council, included a key performance parameter for interoperability. Further, the J6 staff stated that the interoperability key performance parameter in the Joint ORD did not include enough detail to allow the J6 and the Joint Requirements Oversight Council to certify the adequacy of the system interoperability requirement.

CJCS Instruction 3170.01B requires that DoD Components, when formulating the required key performance parameter for interoperability in ORDs, define the level of interoperability for the proposed system. In addition, CJCS Instruction 6212.01B details the methodology for the DoD Components to follow in developing, defining, and certifying the interoperability key performance parameter.

Specifically, CJCS Instruction 6212.01B requires that the DoD Components include a detailed definition of system interoperability requirements in the ORD by providing a high-level operational concept graphic, a system interface description, and an information exchange matrix. The high-level operational concept graphic identifies required top-level joint and combined external interfaces. The system interface description provides more detail through identifying legacy, current, and future joint and combined subsystems and interfaces required to exchange information. The information exchange matrix details the system's top-level joint and combined external information exchange requirements in a matrix format.

The interoperability key performance parameter in the Joint ORD did not include the detailed definition of interoperability that CJCS Instruction 6212.01B requires. The Joint ORD states only that the Enhanced Situational Awareness

System shall be interoperable with Special Operations Forces, Army, Navy, Air Force, Marine Corps, allies within the North Atlantic Treaty Organization, and other allies.

Developing a C4I Support Plan

As of May 2004, the MH-47G Product Manager had not prepared a C4I Support Plan for the MH-47G Program. Because the C4I Support Plan is based on the interoperability requirements defined in the ORD, the product manager would have to develop a C4I Support Plan based on the three ORDs that address the Common Avionics Architecture Suite and other avionics related-requirements. DoD Instruction 4630.8 requires that DoD Components develop C4I Support Plans for all acquisition category-designated programs to document their interoperability requirements and corresponding external supportability requirements. The "MH-47G Service Life Extension Program Single Acquisition Management Plan," September 2002, states that the MH-47G is an Acquisition Category III Program. Additionally, the Guidebook advises that DoD Components should have a C4I Support Plan in place at program initiation and that, as the program matures, or proceeds through multiple evolutionary blocks or phases, the DoD Components should update the C4I Support Plan. The Guidebook further advises that C4I Support Plan updates should contain progressively more detailed and specific, time-phased descriptions of the types of information needed; operational, systems, and technical architecture requirements; information exchange requirements; spectrum supportability, security, connectivity, and interoperability issues; and infrastructure, intelligence, and other information technology, including National Security System support shortfalls.

Factors Affecting Definition of System and Supportability Requirements

USASOC combat developers did not follow established DoD policy for timely updating requirements documents after planning to add additional avionics to the MH-47D/E helicopters to make the MH-47G configuration, and the MH-47G Product Manager did not follow established DoD policy for preparing a C4I Support Plan to address MH-47G interoperability and supportability requirements.

Updating System Requirements Documents. In December 2003, we briefed USASOC staff on the need for updating the ORDs supporting the MH-47G Program. At the briefing, USASOC staff stated that they believed the existing three ORDs adequately supported the development and fielding of the MH-47G helicopter. USASOC staff also stated that:

- SOCOM can tailor the acquisition documentation process to support fielding weapons systems in a timely manner,
- revising the three existing ORDs would unacceptably delay the fielding of the MH-47G helicopter,

- USASOC did not have the personnel or funding required to revise the three ORDs, and

- USASOC, as combat developer, works closely with the MH-47G program management staff to support an overall systems approach to program development.

As noted in the paragraph, "Updating the ORD," the J6 staff of the CJCS stated that the three ORDs were not adequate to fully support development and fielding of the MH-47G because they lacked a Joint Requirements Oversight Council-approved key performance parameter for interoperability containing the detail that CJCS Instruction 6212.01B requires. Without an approved key performance parameter for interoperability, the J6 staff stated that they would not be able to approve a C4I Support Plan for the program, and that the program would not be able to obtain the required system interoperability certification from the Joint Interoperability Test Command.

The J6 and J8 staffs of CJCS recognized the effect that updating the three ORDs could have on timely fielding of the MH-47G and the limited USASOC personnel and funding resources. However, the J6 and J8 staffs stated that they would coordinate with USASOC to document and obtain approval of updated interoperability requirements to minimize the effect on timely fielding of the MH-47G.

In updating the ORDs, the J6 and J8 staff of CJCS indicated that USASOC may be able to use work that the Army has already done in defining requirements in the "Operational Requirements Document for the CH-47F Cargo Helicopter Change 3," March 1, 2004, (the CH-47F ORD). The J6 staff suggested that, rather than spending time and resources revising the three ORDs, a possible alternative could be to allow USASOC to develop a MH-47G annex to the CH-47F ORD. The USASOC could document MH-47G requirements in the ORD annex, including requirements for interoperability, which differed from the Army CH-47F requirements. Developing an annex to the CH-47F ORD would be consistent with the acquisition strategy in the "MH-47G Service Life Extension Program Single Acquisition Management Plan," September 2002, which states that the MH-47G Program will, to the maximum extent possible, capitalize on Army effort on the CH-47F Program. The J6 staff approved the key performance parameter for interoperability that the Army included in the CH-47F ORD.

Need for the C4I Support Plan. In July 2003, we briefed the MH-47G Product Manager and staff on preparing a C4I Support Plan. The MH-47G Product Manager responded that the MH-47G model did not include new interoperability enhancements from the previous MH-47E model, and that the Milestone Decision Authority did not require system interoperability requirements to be placed in the ORD or C4I Support Plan certifications to be obtained from Joint Interoperability Test Command. The Product Manager further stated that his office added the Common Avionics Architecture Suite to the MH-47G configuration as an engineering change proposal to replace obsolete parts in existing MH-47D and E helicopters and that the SOCOM Technology Application Program Office had developed the Common Avionics Architecture Suite as a separate program from the MH-47G Program.

As discussed earlier, DoD Instruction 4630.8 mandates that DoD Components use the C4I Support Plan to document interoperability and supportability requirements for all DoD acquisition category programs. Even if the MH-47G had no interoperability enhancements from the MH-47E, which it will have after the addition of the Army's improved data modem, the Joint Interoperability Test Command had not certified that the MH-47E met DoD interoperability requirements.

Although the J6 and J8 staffs at the CJCS recognized that USASOC had urgent requirements for fielding the MH-47G, they stated that it was also imperative for the MH-47G Product Manager to begin preparing the C4I Support Plan to support interoperability testing and to obtain the required system interoperability certification from Joint Interoperability Test Command. As a first step, J6 staff stated that the MH-47G Product Manager should prepare and submit a request for an Interim Certificate to Operate (ICTO) to the Military Communications Electronics Board, Interoperability Test Panel, which J6 chairs.

The ICTO is designed for acquisition programs that cannot complete interoperability testing requirements before system fielding because of urgent operational needs. The application form for the ICTO provides the JCS with information on system description, planned system interfaces, and a suggested plan for working towards interoperability certification. For systems with urgent fielding requirements, the ICTO provides a JCS-approved alternative to the DoD Instruction 6212.01B requirement for programs to obtain Joint Interoperability Test Command interoperability testing before fielding. The charter for the Interoperability Test Panel states that the ICTO shall not exceed 1 year but it also states that the Interoperability Test Panel will consider extensions.

Effect of Delay in Defining Interoperability and Supportability Requirements

To effectively review and certify interoperability requirements for the MH-47G Program, the JCS needs an ORD that includes a fully defined key performance parameter for interoperability. When documented in the detail and format required in CJCS Instruction 6212.01B, the key performance parameter for system interoperability defines the level of required interoperability for a system through its information exchange requirements. The information exchange requirements document shows who should exchange what information with whom, why the information is necessary, and how the information exchange must occur as the system performs its mission.

Fully defining interoperability requirements for the MH-47G Program in an ORD will also allow the MH-47G Product Manager to prepare a C4I Support Plan. Development and submission of the C4I Support Plan is important, both for the MH-47G Program and for the DoD. For the program, the C4I Support Plan identifies the operational employment concept, support requirements, system interface descriptions, information exchange requirements, potential shortfalls, and potential solutions. Additionally, the Product Manager can use the C4I Support Plan as a framework for planning and executing the interoperability

testing necessary to allow the Joint Interoperability Test Command to certify that the MH-47G helicopter has met system interoperability requirements before the planned full-rate production decision in November 2004.

As explained in the Guidebook, a broad range of DoD offices review individual program C4I Support Plans for a variety of interoperability and supportability assessments to determine DoD-wide shortfalls and potential solutions. Information from individual C4I Support Plans helps DoD identify and timely resolve cross-program command, control, communications, computers, intelligence, surveillance, and reconnaissance infrastructure and support issues.

Recommendations, Management Comments, and Audit Response

Revised Recommendations. As a result of management comments from the Director, Joint Staff, we have revised Recommendations 1. and 2. We revised Recommendation 1. to recommend that, in addition to developing an interoperability key performance parameter for the MH-47G helicopter, the USASOC should also develop a migration strategy for transitioning from the interoperability key performance parameter to a net-ready key performance parameter. Additionally, we revised Recommendation 2. to give the Product Manager for the MH-47G Helicopter Service Life Extension Program updated steps for working toward interoperability certification and validation.

1. We recommend that the Commander, U. S. Army Special Operations Command coordinate with the Joint Chiefs of Staff Directors for Command, Control, Communications and Computers Systems Directorate (J6) and for Force Structure, Resources, and Assessment (J8) to develop an interoperability key performance parameter for the MH-47G helicopter in accordance with Chairman, Joint Chiefs of Staff Instruction 3170.01B, "Requirements Generation System," April 15, 2001, along with a migration strategy for transitioning to the net-ready key performance parameter in accordance with Joint Requirements Oversight Council Memorandum 236-03, "Policy for Updating Capabilities Documents to Incorporate the Net Ready Key Performance Parameter," December 19, 2003.

U. S. Army Special Operations Command Comments. The Deputy Commanding General, responding for the Commander, U. S. Army Special Operations Command, concurred, stating that the USASOC will submit an amendment to the MH-47D/E Service Life Extension Program ORD that will include the requirement for an interoperability key performance parameter in accordance with CJCS Instruction 3170.01B, "Requirements Generation System," April 15, 2001. The Deputy Commanding General further stated that USASOC would forward the amended ORD to SOCOM for approval at the SOCOM Requirements Evaluation Board scheduled for July 21-22, 2004.

Director, Joint Staff Comments. Although not required to comment, the Director, Joint Staff stated that the recommendation should recommend that the Commander, SOCOM coordinate with the Joint Chiefs of Staff Directors for Command, Control, Communications and Computers Systems Directorate (J6)

and for Force Structure, Resources, and Assessment (J8) to ensure that the MH-47G Program meets requirements for capabilities documentation, interoperability certification, and certification testing in accordance with the latest Joint Staff policy, to include CJCS Instruction 3170.01D, "Joint Capabilities Integration and Development System," March 12, 2004; CJCS Manual 3170.01A, "Operation of the Joint Capabilities Integration and Development System, March 12, 2004; and CJCS Instruction 6212.01C, "Interoperability and Supportability of Information Technology and National Security Systems," November 20, 2003. Additionally, in response to Recommendation 2., the Director, Joint Staff stated that USASOC should develop a plan to prepare and submit the net-ready key performance parameter in the required capabilities and supportability documentation for the MH-47G helicopter.

Audit Response. The comments from the Deputy Commanding General, USASOC were responsive to draft Recommendation 1. for developing an interoperability key performance parameter for the MH-47G helicopter. However, based on the Director, Joint Staff comments that USASOC should define system capabilities in accordance the latest Joint Staff policy, we revised Recommendation 1. to add that USASOC should also develop a migration strategy for transitioning to a net-ready key performance parameter. As explained in the finding, CJCS Instruction 6212.01C, which superceded CJCS Instruction 6212.01B, requires the broader-scoped, net-ready key performance parameter rather than the interoperability key performance parameter. Direction in the Joint Requirements Oversight Council Memorandum 236-03, "Policy for Updating Capabilities Documents to Incorporate the Net Ready Key Performance Parameter," December 19, 2003 (the Joint Requirements Oversight Council Memorandum), further supports the revision to Recommendation 1. Specifically, the Joint Requirements Oversight Memorandum states that all capabilities documents containing key performance parameters will include the net-ready key performance parameter or a migration strategy for transitioning to the net-ready key performance parameter unless the Joint Requirements Oversight Council grants an exemption for a specific program.

In response to the final report, we request that the Commander, USASOC provide comments on the revised recommendation, which includes establishing a migration plan for transitioning from the interoperability key performance parameter to the net-ready key performance parameter as required in the Joint Requirements Oversight Council Memorandum.

2. We recommend that the Product Manager for the MH-47G Helicopter Service Life Extension Program:

a. Coordinate with the Joint Chiefs of Staff Directors for Command, Control, Communications and Computers Systems Directorate (J6) and for Force Structure, Resources, and Assessment (J8) to:

(1) determine the appropriate capabilities documentation needed to meet interoperability certification and validation requirements, and

(2) develop a plan to prepare and submit the required documentation, obtain interoperability and supportability certification, and obtain interoperability test certification in accordance with Chairman, Joint Chiefs of Staff Instruction 6212.01C, "Interoperability and Supportability of Information Technology and National Security Systems," November 20, 2003.

b. Prepare and submit to the Interoperability Test Panel a request for an Interim Certificate to Operate that includes information on system description, planned interfaces, and a suggested plan for working towards interoperability certification and Joint Interoperability Test Command test certification in accordance with the Military Communication Electronics Board Interoperability Test Panel Charter, Annex D; the Chairman, Joint Chiefs of Staff Instruction 3170 Series publications; and Chairman, Joint Chiefs of Staff Instruction 6212.01C, "Interoperability and Supportability of Information Technology and National Security Systems," November 20, 2003.

U. S. Army Special Operations Command Comments. The Deputy Commanding General, responding for the Commander, USASOC nonconcurred, stating that no extensive interoperability testing should be required for the MH-47G helicopter because of the previously demonstrated interoperability of the predecessor model, the MH-47D/E. The Deputy Commanding General stated that the USASOC employment of the MH-47D/E helicopters since 1996, including recent deployments in support of the Global War on Terrorism, had demonstrated a system interoperability that ensured the warfighter an effective and integrated array of aircraft systems and networks that meet all mission needs. Further, the Deputy Commanding General stated that USASOC has been and will continue addressing interoperability assurance during developmental and operational testing and user evaluation of airborne platforms for special operations forces.

Director, Joint Staff Comments. Although not required to comment, the Director, Joint Staff stated that, to resolve draft report issues, we should revise Recommendation 2. to recommend that the Product Manager for the MH-47G Helicopter Service Life Extension Program:

- coordinate with the Joint Chiefs of Staff Directors for Command, Control, Communications and Computers Systems Directorate (J6) and for Force Structure, Resources, and Assessment (J8) to determine the appropriate capabilities documentation needed to meet interoperability certification and validation requirements and to develop a plan to prepare and submit the required documentation (including the net-ready key performance parameter), obtain interoperability and supportability certification, and obtain interoperability test certification in accordance with current polices; and

- prepare and submit to the Interoperability Test Panel a request for an Interim Certificate to Operate that includes information on system description, planned interfaces, and a suggested plan for working towards interoperability certification and Joint Interoperability Test Command test

certification in accordance with the Military Communication Electronics Board Interoperability Test Panel Charter, Annex D; the CJCS 3170 Series publications; and CJCS Instruction 6212.01C.

Audit Response. The comments from the Deputy Commanding General, USASOC were not responsive. The Deputy Commanding General's assertion that the USASOC did not need to perform extensive interoperability testing for the MH-47G helicopter because of the previously demonstrated interoperability of the predecessor helicopter, the MH-47D/E, is contrary to policy in both CJCS Instruction 6212.01B and the revision, CJCS Instruction 6212.01C. Specifically, CJCS Instruction 6212.01B states that hardware and software modifications that affect the interoperability of fielded systems will require Joint Interoperability Test Command recertification before the modifications are fielded for initial operational capability. As stated in the finding, the Joint Interoperability Test Command had never certified that the MH-47 D/E met DoD interoperability requirements. Also, the planned addition of the Army's improved data modem to the MH-47G will affect system interoperability and thus require Joint Interoperability Test Command certification.

CJCS Instruction 6212.01C also requires interoperability and supportability certification and certification testing for fielded systems. Specifically, the Instruction requires verification that all proposed material remedies for fielded systems (such as the planned addition of the Army's improved data modem to the MH-47G) meet interoperability and supportability requirements. Additionally, CJCS Instruction 6212.01C states that, if a program fails to meet certification requirements, the Joint Chiefs of Staff Director for Command, Control, Communications and Computers Systems Directorate (J6) will not validate the program and will recommend that the program not proceed to the next milestone. In addition, the program will not receive additional funding until the program achieves compliance and validation. The Director for Command, Control, Communications and Computers Systems Directorate (J6) will forward these recommendations to the Under Secretary of Defense for Acquisition, Technology, and Logistics; the Under Secretary of Defense (Comptroller); the Joint Requirements Oversight Council; and other officials within the Office of the Secretary of Defense for consideration and action. Additionally, the Director will request that that the Director, Operational Test and Evaluation add the program to the Interoperability Watch List, in accordance with DoD Instruction 4630.8.

Accordingly, we revised Recommendation 2. as suggested by the Director, Joint Staff to provide the Product Manager for the MH-47G Helicopter Service Life Extension Program with the necessary steps required to work towards interoperability certification under the latest Joint Staff policy. We request that the Product Manager for the MH-47G Helicopter Service Life Extension Program respond to the revised recommendation in the final report.

Appendix A. Scope and Methodology

We evaluated whether the Product Manager for the MH-47G helicopter was effectively developing and preparing the program for full rate production. Consequently, the review focused on the areas of requirements generation, design, test and evaluation, contracting, and Defense Contract Management Agency (DCMA) support.

To evaluate whether the product manager was effectively managing the MH-47G Program, we examined system operational requirements documents; CJCS Instruction 3170.01B, "Requirements Generation System," April 15, 2001; CJCS Instruction 6212.01B, "Interoperability and Supportability of National Security Systems (NSS) and Information Technology (IT) Systems," May 8, 2000; DoD Instruction 4630.8, "Procedures for Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," May 2, 2002; DoD Directive 5000.1, "The Defense Acquisition System," May 12, 2003; DoD Instruction 5000.2, "Operation of the Defense Acquisition System," May 12, 2003; the "Interim Defense Acquisition Guidebook," (the Guidebook), October 30, 2002; and the "Defense Contract Management Agency One Book," (the One Book), June 2003.

We reviewed documentation dated from September 1995 to March 2004 that we obtained from the MH-47G Product Office and the SOCOM Technology Application Program Office at Fort Eustis, Virginia; the U. S. Army Special Operations Command, Fort Bragg, North Carolina; the 160th Special Operations Aviation Regiment (Airborne), Fort Campbell, Kentucky; the DCMA - Boeing Helicopters, Philadelphia, Pennsylvania; and the DCMA - Rockwell Collins, Cedar Rapids, Iowa.

We performed this audit from October 2003 through March 2004 in accordance with generally accepted government auditing standards.

Use of Computer-Processed Data. We did not use computer-processed data to perform this audit.

Use of Technical Assistance. Two electrical engineers from the Electronics Engineering Branch, Technical Assessment Division in Audit Followup and Technical Support, Office of the Inspector General of the Department of Defense assisted in the audit. The electrical engineers assisted the audit team in analyzing the MH-47G Program system design.

General Accounting Office High-Risk Area. The General Accounting Office has identified several high-risk areas in DoD. This report provides coverage of the DoD Weapons Systems Acquisition high-risk area.

Management Control Program Review

DoD Directive 5010.38, "Management Control (MC) Program," August 26, 1996, and DoD Instruction 5010.40, "Management Control (MC) Program Procedures,"

August 28, 1996, require DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of the Review of the Management Control Program. In accordance with DoD Directive 5000.1, acquisition managers are to use program cost, schedule, and performance parameters as control objectives to implement the requirements of DoD Directive 5010.38. Accordingly, we reviewed management controls that the Chief of Staff, USASOC established that were directly related to requirements generation, design, acquisition planning, program assessments, contracting, and test and evaluation for the MH-47G Program.

Adequacy of Management Controls. We identified a material management control weakness, as defined in DoD Instruction 5010.40, relating to requirements generation. Specifically, the management controls were not adequate to ensure that the Product Manager fully defined system interoperability and supportability requirements and obtained appropriate validation in accordance with CJCS Instructions 3170.01B and 6212.01B, and DoD Instruction 4630.8. Recommendations 1. and 2., if implemented, will ensure adherence to regulatory requirements. We will provide a copy of the report to the senior official responsible for management controls in the Office of Chief of Staff, USASOC.

Adequacy of Management's Self-Evaluation. The Chief of Staff, USASOC required that the Product Manager, Technology Applications Program Office, as a management control assessable unit, perform reviews of programs under the Product Manager's control to satisfy the management control requirement for self-evaluation. Although the Product Manager reviewed the functional areas of Budget Execution and the Government Purchase Card Program in support of his FY2003 statement of assurance to the Chief of Staff, he did not identify the specific management control weaknesses that the audit identified because he did not require the management control administrator at the MH-47G Product Office to review those areas as part of the MH-47G Program self-evaluation.

Prior Coverage

No prior coverage has been conducted on MH-47G Service Life Extension Program during the last 5 years. However, the Inspector General of the Department of Defense (IG DoD) issued a report on the Army CH-47F Improved Cargo Helicopter, which shares a production line with the MH-47G helicopter. Unrestricted IG DoD reports can be accessed at http://www.dodig.osd.mil/audit/reports.

IG DoD

IG DoD Report No. D-2004-046, "Acquisition of the CH-47F Improved Cargo Helicopter," January 21, 2004

Appendix B. Management's Corrective Actions Taken During the Audit

The SOCOM and the Army initiated corrective actions during the audit to address audit issues concerning updating and approving a draft program management MOA between the SOCOM Product Manager, Technology Applications Program Office and the Army Project Manager, Cargo Helicopters. An updated program management MOA was needed to enable SOCOM and Army managers to better coordinate the development and production of the MH-47G and CH-47F helicopters. Also, the Product Manager, Technology Applications Program Office and the Commander, DCMA - Boeing, Philadelphia, revised and approved the contract support MOA to fully define DCMA contractor surveillance activities for the Product Manager. Additionally, the MH-47G Product Manager revised the draft test and evaluation master plan to quantify threshold requirements for measures of effectiveness and suitability, provide the rationale for not requiring live-fire test and evaluation, and provide required schedule dates for test resources. Finally, the MH-47G Product Manager met with the contracting staff to emphasize the need for prompt communication of critical information between his procurement contracting office and the administrative contract office supporting the Army.

Updating and Approving the Program Management MOA. The SOCOM Product Manager, Technology Applications Program Office and the Army Project Manager, Improved Cargo Helicopters revised the draft "Memorandum of Agreement Between the Product Manager - The Technology Applications Program Office and the Project Manager - Improved Cargo Helicopter (ICH) Program Office," September 15, 2003, to:

- specify the new helicopter production profile that Program Decision Memorandum -1 mandated,
- require the Army to provide 30 helicopters to SOCOM in support of the new production profile, and
- perform service life extension on aircraft sequentially, from oldest aircraft to newest, thereby reducing future maintenance costs.

The revisions to the MOA will enhance effective coordination between the MH-47G and the CH-47F project offices, their supporting organizations, and contractors and help SOCOM and the Army better plan for managing the schedule, technical, and cost risks associated with the programs. The SOCOM and the Army approved the revised MOA on October 3, 2003.

Revising and Approving the Contract Support MOA. The Product Manager, Technical Applications Program Office and the Commander, DCMA - Boeing, Philadelphia, revised the draft "Memorandum of Agreement Between the

Technology Applications Program Office and the DCMA - Boeing, Philadelphia," June 25, 2003, to:

- define DCMA use and participation in integrated product teams to monitor and mitigate program risks,
- require that DCMA review and assess the contractor's earned value management system and report program performance assessments to the MH-47G Product Manager, and
- specify DCMA responsibilities for MH-47G flight-testing to include performing maintenance and acceptance tests, monitoring contractor flight operations, providing production development feedback during operational tests, and monitoring Government-furnished equipment.

As a result of the revisions to the support MOA, DCMA will provide timely insight, information, analysis, and actions to prevent, or identify and resolve, existing and potential program problems, enabling the Product Manager to better maintain the MH-47G Program's performance within cost and schedule as it transitions from LRIP to full-rate production.

Revising the Test and Evaluation Master Plan. The Project Manager, Technology Application Program Office issued the revised MH-47G Test and Evaluation Master Plan, February 20, 2004, to:

- Define threshold values for critical operational requirements for:
    - radar warning;
    - radar jamming;
    - decoys for heat seeking missiles;
    - taking off, flying, and landing in adverse weather without external reference;
    - conducting covert operations without artificial illumination;
    - providing capability to receive data through a data logger; and
    - transmitting forward-looking infrared video by ultra-high frequency, satellite communication, or high frequency.
- Provide rationale for not planning live-fire test and evaluation for the MH-47G.
- Provide schedule dates for test articles and test sites and instruments for spectrum analysis, human factors, electromagnetic vulnerability, and color weather radar.

The revisions to the test and evaluation master plan should help the MH-47G Product Manager and SOCOM to better plan and execute testing to evaluate the MH-47G. SOCOM approved the revised test and evaluation master plan on March 12, 2004.

Communicating Critical Contract-Related Information. In April 2003, the SOCOM procurement contracting office experienced a 1 month delay in receiving notification from the Army administrative contract office about a contract modification for 1 month delay in inducting four of the seven CH-47D helicopters into the Summit Aviation Induction Center to begin the upgrade to the MH-47G and the CH-47F configurations. Consequently, according to SOCOM contracting office staff, the MH-47G Product Manager met with the contracting staff to emphasize the need for prompt communication of critical information between his procurement contracting office and the administrative contract office supporting the Army. Because the MH-47G and CH-47F programs will share the same contractor production line, it is critical that SOCOM and Army contracting offices relay important contract-related information.

Appendix C. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology, and Logistics
Under Secretary of Defense (Comptroller)/Chief Financial Officer
    Deputy Chief Financial Officer
    Deputy Comptroller (Program/Budget)
Director, Operational Test and Evaluation
Director, Program Analysis and Evaluation

Joint Staff

Director, Joint Staff

Department of the Army

Assistant Secretary of the Army (Financial Management and Comptroller)
Auditor General, Department of the Army

Department of the Navy

Naval Inspector General
Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department of the Air Force

Unified Command

Commander, U. S. Special Operations Command
    Commander, U.S. Army Special Operations Command
    Product Manager, Technology Applications Program Office

Other Defense Organization

Director, Defense Contract Management Agency

Non-Defense Federal Organization

Office of Management and Budget

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Committee on Armed Services
House Committee on Government Reform
House Subcommittee on Government Efficiency and Financial Management, Committee on Government Reform
House Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform
House Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census, Committee on Government Reform

Department of the Army Comments

DEPARTMENT OF THE ARMY
UNITED STATES ARMY SPECIAL OPERATIONS COMMAND (AIRBORNE)
FORT BRAGG, NORTH CAROLINA 28310-5200

REPLY TO ATTENTION OF:
AODG

11 MAY 2004

MEMORANDUM FOR Inspector General of the Department of Defense, 400 Army Navy Drive, Arlington, VA 22202-4704

SUBJECT: U.S. Army Special Operations Command Response to the Draft Report on the Acquisition of the MH-47G Helicopter Service Life Extension Program (Project NO. D2004AE-0014)

1. Reference.

a. Draft of a Proposed Report, Acquisition of the MH-47G Helicopter Service Life Extension Program, Project No. D2004AE-0014, March 29, 2004

b. Chairmen of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01B, Requirements Generation Process

c. CJCSI 6212.01B, Interoperability and Supportability of National Security Systems, and Information Technology Systems

2. The USASOC concurs with recommendation 1 in reference 1a. The USASOC, G-8, in conjunction with the 160th Special Operations Aviation Regiment (SOAR) Systems Integration and Maintenance Office (SIMO), will submit an amendment to the MH-47D/E Service Life Extension Program (SLEP) Operational Requirement Document (ORD). The amendment will include the requirement for an Interoperability KPP in accordance with Chief Joint Chiefs of Staff Instruction (CJCSI) 31.70.01B, dated 15 April 2001, enclosure E, paragraph 1c(4)(b). The ORD amendment will be completed and forwarded to USSOCOM for approval at the 21-22 July 2004 Special Operations Command Requirements Evaluation Board. The USASOC is coordinating with the U.S. Special Operations Command (USSOCOM) Requirements Office who will assist in the requirements' approval process.

b. The USASOC non-concurs with recommendations 2a through 2 c outlined in reference 1a. In reference 1b, the goal of testing and certification is to ensure interoperability in the intended operational environment and to establish

interoperability characteristics. As evidenced by the employment of the MH-47D/E aircraft since 1996, and in recent deployments in support of the Global War on Terrorism, existing interoperability in the MH-47D/E has been assured. The interoperability demonstrated by the MH-47D/E has ensured the warfighter an effective and integrated array of aircraft systems and networks that meet all mission needs. The MH-47G model aircraft is an updated model designation for an MH-47D/E aircraft that has completed the SLEP. No extensive additional interoperability testing should be required.

4. Interoperability assurance has been and continues to be addressed during Developmental Testing/Operational Testing and user evaluation of SOF airborne platforms. This practice and the conservation of resources have facilitated rapid fielding of SOF airborne assets as validated by the Milestone Decision Authority. The MH-47D/E and future MH-47G helicopters are the critical cornerstones of USSOCOM's Global War on Terrorism. It is our intent to place the MH-47G into full rate production without delay.

Howard W. Yellen

HOWARD W. YELLEN
Brigadier General
Deputy Commanding General

CF:
USSOCOM (SOOP-RV)
USSOCOM (SORR-R)
USSOCOM (SOAL-M&R)
AMCOM (AMSAM-TASO)

Joint Staff Comments

THE JOINT STAFF
WASHINGTON, DC

Reply ZIP Code:
20318-0300

15 May 2004

MEMORANDUM FOR THE INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

Subject: Report on the Acquisition of the MH-47G Helicopter Service Life Extension Program (Project No. D2004 AE-0014)

1. Thank you for the opportunity to review the subject draft report.[1] The Joint Staff concurs subject to incorporation of the enclosed comments.

2. The Joint Staff point of contact is Captain James R. Sullivan, USN; J-8/CAD; 703-614-3683.

Approved & Secured with Approved by: T.

T. J. KEATING
VADM, USN
DIRECTOR, JOINT STAFF

Enclosure

Reference:
1 DOD(IG) memorandum, 29 March 2004, "Report on the Acquisition of the MH-47G Helicopter Service Life Extension Program (Project No. D2004AE-0014)"

Final Report Reference

ENCLOSURE

PROPOSED COMMENTS ON THE REPORT ON THE ACQUISITION OF THE MH-47G HELICOPTER SERVICE LIFE EXTENSION PROGRAM (PROJECT NO. D2004AE-0014)

Page 10

1. Page 10, "Recommendations," paragraph 1. Delete, and substitute: "We recommend that the Commander, U.S. Special Operations Command, coordinate with the Joint Chiefs of Staff Directors for Command, Control, Communications and Computer Systems (J6) and for Force Structure, Resources, and Assessments (J8) to ensure the MH-47G program meets requirements for capabilities documentation, interoperability certification and certification testing in accordance with Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01D, 12 March 2004, "Joint Capabilities Integration Development System," Chairman of the Joint Chiefs of Staff Manual (CJCSM) 3170.01A, 12 March 2004, "Operation of the Joint Capabilities Integration and Development System," and CJCSI 6212.01C, 20 November 2003, "Interoperability and Supportability of Information Technology and National Security Systems."

REASON: Reflects most current documents.

Pages 11-12

2. Page 10, Recommendations," paragraph 2. Delete, and substitute: "We recommend that the Product Manager for the MH-47G Helicopter Service Life Extension Program:

"a. Coordinate with Joint Staff J-6 (J-6I Division) and J-8 to determine the appropriate capabilities documentation that must be developed and submitted to meet certification and validation requirements. Develop a plan to prepare and submit the required capabilities and supportability documentation (to include the Net Ready Key Performance Parameter [NR-KPP]), obtain interoperability and supportability certification and obtain interoperability test certification in accordance with current policies.

"b. Prepare and submit to the Interoperability Test Panel (ITP) a request for an Interim Certificate to Operate (ICTO) in accordance with Military Communication Electronics Board (MCEB) ITP Charter, Annex D, and CJCSI 6212.01C. The ICTO must include information on system description, planned interfaces and a suggested plan for working toward interoperability certification and Joint Interoperability Test Command test certification in accordance with CJCS 3170 Series publications and CJCSI 6212.01C. Additional information on the ICTO can be obtained at the following website: http://jitc.fhu.disa..mil/itp/ictoinfo.htm."

REASON: Provides exact steps required to resolve draft report issues.

Enclosure

Team Members

The Office of the Deputy Inspector General for Auditing of the Department of Defense, Acquisition Management prepared this report. Personnel of the Office of the Inspector General of the Department of Defense who contributed to the report are listed below.

John E. Meling
Harold C. James
Patrick E. McHale
Bradford C. Green
Vilma R. Sacco
Jamie Bobbio
Wei Chang
Jacqueline N. Pugh